

Amendments to the Claims

A complete listing of the claims is provided below. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A slip joint adaptor comprising:

a housing;

a pipe inserted into the housing, the pipe having a tubular body, a flared end inside the housing and a shoulder outside the housing;

a first chamber contained within the housing and configured to allow ~~a~~the body of the pipe to slide through it but not to allow the flared end or the shoulder to slide through it;

a second chamber contained within the housing and configured to allow ~~an~~the flared end of ~~a~~the pipe to slide through it and to provide a substantially sealed bridge for material flowing through the pipe and a second pipe when an end of the pipe does not contact an end of the second pipe; and

a third chamber contained within the housing and configured to attach to an end of ~~a~~the second pipe, wherein the shoulder is positioned to prevent the flared end from extending beyond the housing.

2. (Original) The slip joint adaptor of claim 1, wherein the first, second and third chambers are substantially coaxial.

3. (Canceled)

4. (Currently Amended) The slip joint adaptor of claim 1, wherein the third chamber has threads for attaching to ~~an~~the end of ~~a~~the second pipe.

5. (Currently Amended) The slip joint adaptor of claim 1, further comprising ~~at least one~~ an annular groove in the first chamber configured to house an O ring gasket.

6. (Currently Amended) The slip joint adaptor of claim 5, further comprising: ~~a pipe extending through the first chamber in a slidable fashion and having an end in the second chamber; and~~ an O ring gasket in the ~~at least one~~ groove, the O ring gasket having an inner diameter less than an outer diameter of the pipe[[,]] and ~~the O ring gasket having~~ an outer diameter greater than the diameter of the groove.

7. (Original) The slip joint adaptor of claim 1, further comprising a tapered portion located between the first and second chambers.

8 - 9. (Canceled)

10. (Currently Amended) The slip joint adaptor of claim 1, further comprising: ~~a pipe extending through the first chamber in a slidable fashion and having an end in the second chamber; and~~ a seal located between the pipe and the housing substantially sealing the second chamber from the outside of the housing via the first chamber.

11. (Currently Amended) A slip joint adaptor comprising:
means for conveying a fluid; and
means for housing ~~a pipe~~ the conveying means configured to allow ~~an end of a first pipe~~ the conveying means to slide through it when the means for housing is tightly attached to additional means for conveying the fluid ~~an end of a second pipe; the housing means~~ comprising:

~~means for limiting sliding motion of the first pipe so that the first pipe does not slide out of the housing means;~~

means for attaching to the additional conveying means ~~end of the second pipe~~;

and

means for bridging the fluid between the conveying means and the additional conveying means ~~flowing through the pipe and the second pipe when the conveying means does not contact the additional conveying means~~ ~~an end of the pipe does not contact the end of the second pipe~~; wherein the conveying means comprise:

terminating means for abutting against an inner surface of the housing means to prevent the conveying means from exiting the housing means,

shoulder means for abutting against an outer surface of the housing means to prevent the terminating means from extending beyond the housing means, and

means for substantially sealing around the conveying means.

12. (Cancelled)

13. (Currently Amended) The slip joint adaptor of claim 11, wherein the attaching means ~~has comprise threads for attaching to an end of a second pipe~~ the additional conveying means.

14. (Currently Amended) The slip joint adaptor of claim 11, further comprising ~~at least one~~ seal containing means ~~in-~~located between the bridging means and the outer surface of the means for housing.

15 - 16. (Canceled)

17. (Currently Amended) The slip joint adaptor of claim 14~~[[1]]~~, further comprising:~~a pipe extending through the housing means; and means for sealing the pipe into the means for housing in the seal containing means.~~

18. (Currently Amended) A method of attaching two pipe ends comprising:
sliding a first pipe ~~through~~into a slip joint adapter;
flaring an end of the pipe inside the slip joint adapter to prevent the first pipe from exiting the slip joint adapter;
positioning the slip joint adapter to ~~the~~a desired location on the first pipe;
providing a ~~stop~~shoulder on the first pipe outside the slip joint adapter to prevent the flared end from extending beyond that blocks the first pipe from sliding into the slip joint adapter farther than a predetermined distance;
attaching the slip joint adapter to an end of a second pipe; and
bridging in a substantially sealed manner material carried by the pipe with the slip joint adapter between two non-contacting pipe ends while the pipe is free to slide ~~through~~within the slip joint adapter.

19. (Currently Amended) The method of claim 18, further comprising sealing between the first pipe ~~with~~and the slip joint adapter.

20 - 24. (Canceled)

25. (Previously Presented) The slip joint adaptor of claim 1, wherein the first and second chambers are configured to allow the pipe to slide in an axial direction relative to the housing when the housing is tightly attached to the end of the second pipe.

26. (Previously Presented) The slip joint adaptor of claim 4, wherein the threads tightly engage second pipe threads associated with the end of the second pipe.

27. (Canceled)

28. (New) The slip joint adaptor of claim 1, wherein the housing consists of a single unit.

29. (New) The slip joint adaptor of claim 1, wherein the first chamber is at a first end of the housing and opens into the second chamber opposite the first end, the second chamber opens into the third chamber opposite the first chamber, and the third chamber is at a second end of the housing.

30. (New) The slip joint adaptor of claim 1, wherein the first chamber is further configured to allow the body of the pipe to rotate within the housing and the second chamber is further configured to allow the flared end to rotate within the housing.

31. (New) The slip joint adaptor of claim 1, wherein the shoulder is further positioned to prevent the flared end from extending into the third chamber.

32. (New) The slip joint adaptor of claim 5, further comprising:
a second annular groove in the first chamber configured to house a second O ring gasket;
a first O ring gasket in the first groove; and
a second O ring gasket in the second annular groove.

33. (New) The slip joint adaptor of claim 11, wherein the housing means consists of a single unit.

34. (New) The slip joint adaptor of claim 11, wherein the housing means is further configured to allow the conveying means to rotate within the housing means.

35. (New) The slip joint adaptor of claim 11, further comprising additional seal containing means located between the bridging means and the outer surface of the housing means and additional means for sealing in the additional seal containing means.

36. (New) The method of claim 18, further comprising providing a one-piece housing of the slip joint adapter.

37. (New) The method of claim 18, further comprising bridging in a substantially sealed manner material carried by the first pipe with the slip joint adapter between two non-contacting pipe ends while the first pipe is free to rotate within the slip joint adapter.